

Comparisons of Job Characteristics

Focus Occupation: [Commercial and Industrial Designers \(27-1021\)](#)

Associated Occupation: [Mechanical Drafters \(17-3013\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Commercial and Industrial Designers (27-1021)

Associated Occupation: Mechanical Drafters (17-3013)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Design	5.2	22.0	22.2	0	Current knowledge level may be sufficient
Engineering and Technology	5.7	17.6	18.3	0	Current knowledge level may be sufficient
Mathematics	9.2	13.0	10.7	<	Expanded education and/or training may be required
Mechanical	6.8	12.4	15.3	>	Current knowledge level is likely sufficient
Physics	4.3	8.3	9.6	>	Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Commercial and Industrial Designers (27-1021)

Associated Occupation: Mechanical Drafters (17-3013)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematics	6.2	10.6	8.7	<	A higher skill level may be required
Operations Analysis	5.0	8.6	12.0	>>	Skill level is likely more than sufficient
Technology Design	2.6	6.0	9.5	>>	Skill level is likely more than sufficient
Programming	2.2	5.8	2.8	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Commercial and Industrial Designers (27-1021)
Associated Occupation: Mechanical Drafters (17-3013)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Near Vision	11.1	12.7	13.5	0	Current ability level may be sufficient
Visualization	7.5	11.7	13.1	>	Current ability level is likely sufficient
Mathematical Reasoning	6.3	11.1	9.6	<	Some improvement in abilities may be required
Flexibility of Closure	7.8	9.9	9.9	0	Current ability level may be sufficient
Finger Dexterity	7.6	9.7	8.5	<	Some improvement in abilities may be required
Originality	7.6	9.6	14.7	>>	Current ability level is likely more than sufficient
Fluency of Ideas	7.6	9.4	12.8	>>	Current ability level is likely more than sufficient
Number Facility	6.3	9.3	7.0	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Commercial and Industrial Designers (27-1021)
Associated Occupation: Mechanical Drafters (17-3013)

Work Activities	Exclusivity of Activity
Analyze technical data, designs, or preliminary specifications	47
Consult with customers concerning needs	69
Draw prototypes, plans, or maps to scale	57
Follow manufacturing methods or techniques	73
Read blueprints	10
Use computer aided drafting or design software for design, drafting, modeling, or other engineering tasks	58
Use drafting or mechanical drawing techniques	50

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 77

Focus Occupation: Commercial and Industrial Designers (27-1021)
Associated Occupation: Mechanical Drafters (17-3013)

Tools and Technologies	Exclusivity
Business function specific software	1

Computers	1
Content authoring and editing software	1
Content management software	6
Data management and query software	1
Industry specific software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.